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On the Treatment
of
Dysentery

By D^r Everard
Assistant Surgeon, 54th Regiment.

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OBSERVATIONS

ON THE

TREATMENT OF DYSENTERY.

By R. H. EVERARD, M. D.

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I do not pretend to have any thing new to advance on the subject of Dysentery, but I am induced to state a few particulars of what has occurred in my practice during the last 18 months I have had charge of the Hospital of H. M. 54th Regiment, as a warning to Junior Medical Officers, and to those coming to India for the first time ; by shewing in what respects I consider I erred, or was deficient in my treatment of this dangerous malady, at first.

I got Medical charge of the Regiment in May last year, when the Surgeon left on sick leave ; and, following the customary practice of only *local* bleeding, purging frequently with compound powder of Jalap, *routine doses of Calomel and Opium in every case*, opiate Enemata, and Blisters rather indiscriminately applied to the abdomen—out of 57 cases I had in the first $6\frac{1}{2}$ months at the above station, and treated after this fashion, I lost 6 ; being

in the proportion of 1 in $9\frac{1}{2}$. One of them had an abscess in the Liver.

The Deputy Inspector General of Hospitals visited us in December, and removed the hesitation I felt about changing my mode of treatment. From that time, I have freely used *general* bleeding, usually to syncope on the first admission of every case in which there was blood in the stools, with straining, whether pain of the abdomen was complained of or not; followed up by leeching, or a repetition of the general bleeding in 12 hours, if blood still appeared in the stools or much abdominal pain existed. I discarded the Calomel and Opium routine entirely, and only used Calomel occasionally in a sedative (Θ) dose within the first day or two of admission; I cleared out the bowels well with Castor oil, mixed occasionally with Olive oil, if the other was too irritating; and always prescribed tepid hip baths (under 100°), and small dilute Chloride of Soda Enemata; with 10 grain doses of Pulvis Doveri at bed time; and kept the patient on low farinaceous diet. Among 130 cases treated in this manner at Trichinopoly and Fort St. George, (which have been of the identical character as the 57 before mentioned,) there have been only 5 deaths—or 1 in 26.* Of these one

* In order to determine the comparative value of different modes of treatment in given diseases, the necessity of rigorous numerical analysis is evident. In advocating the superiority of any particular remedy or plan of cure, Medical Officers can only shew the accuracy of their statements, in a satisfactory manner, by Analytical Tables:—such as Dr. Lorimer's of the treatment of Cholera in the 24th Regt. N. I. in Vol. I of this Journal; or as the Army Medical Officer gave of the non-mercurial practice in Venereal disease, whereby its advantage over the mercurial practice was demonstrated. We recommend attention to the following observation of Dr. Thomson, in the Ed. Med. and Surg. Journal, No. 136. “If Medical men would give, in a Tabular form, an account of the number
“ of cases of any particular disease they have treated, the effect of the remedies
“ employed, the duration of each case or set of cases, and the mortality which
“ occurred, together with the morbid appearances found on dissection, &c., it
“ would contribute much to the progress of the Medical art; for, however limit-
“ ed the field of observation of any single individual may be, he will find that
“ although he may not be able to establish any new plan of treatment, he at
“ least may adduce facts which will either tend to confirm or invalidate some
“ particular doctrine; and by so doing he will perform no mean service to his
“ art.”—OFFG. ED.

(Tate) had abscess of the Liver, and another (Bamford) died from complication with dropsy.

I shall not take up space in giving a minute description of symptoms, as they are so well known; but one thing I particularly wish to observe is, that pain or shrinking uneasiness may always be discovered *in the commencement* of dysentery, if a *careful* examination be made in the course of the large intestine, even without making great pressure (which is to be avoided): it is only in an advanced stage, when gangrene has taken place, that pain on pressure may not be thus made cognizable. The patient, however, very often does not *complain* of abdominal pain, nor allow that he has any uneasiness, if asked; and there is usually little or no constitutional disturbance at first, on which account inexperienced Practitioners are apt to be deceived:—in such cases, however, the appearance of the stools is a pretty sure guide; for, if they are scanty, Lympho-mucoid, or muco-purulent, and tinged with blood, there is danger, and energetic practice is instantly called for *in this Country*,—in European subjects at least.

Occasionally there are slight horripilations very early; and a sympathetic crampy feeling in the calves of the legs; the skin of the abdomen sometimes feels cold and clammy; and the patient is relieved for a time after being at stool. In such cases, I begin the treatment by a Tepid Bath at 96° or 98°—a large tepid water enema*, and a dose of compound powder of Jalap; and watch the symptoms upon the accession of reaction; and where the patient is brought to Hospital *very early*, the necessity for *general* bleeding may by these means be frequently obviated.

* In the early stage of Dysentery, many circumstances show that there is often, nay generally, a spasmodic constriction at the Sigmoid flexure, preventing the passage of the fæces downwards into the Rectum, causing straining, scanty motions, and occasionally protrusion of the gut. It is from this that there is sometimes found a great degree of opposition to the ascent of Enemata, as well as obstruction to the propulsion of the contents of the Colon. This has been well explained by Dr. O'Beirne of Dublin; and, following his directions in such cases, we have often afforded the most effectual and instantaneous relief, by introducing an emollient Enema by means of a gum elastic tube (*as that of the stomach pump*) passed up through the annulus of the Sigmoid flexure.—OFFG. ED.

In more advanced Stages, febrile symptoms supervene, (which I conceive to be symptomatic), and then I believe there is certainly serious ulceration of the Mucous membrane, more or less extensive; experience, however, tells me that in whatever stage of the disease a soldier may first apply for Medical aid, if there be blood in his stools with straining and tenesmus, one bleeding to Syncope, *in the erect posture*, will be necessary; and further, that it will very generally deprive the stools of blood; and where there is pain of the abdomen with great tenesmus, and the complaint is of some days standing, the bleeding will probably have to be once or oftener repeated, and at each time to fainting, or to a state approaching to it—which I term *ad effectum*. The quantity of blood required to be taken for this purpose, cannot be prescribed *by ounces*.*

By such measures as I have now described, within 48 hours from the commencement, either the disorganizing force of the disease is vanquished, and little more required to be done than to keep the patient quiescent, and on congee water a short time, exchanging it for Sago and Milk as he advances to convalescence; or we may prognosticate that the result will be fatal, or the recovery tedious and precarious.

* Although we entirely agree that abstraction of blood is a remedy of paramount importance for the prompt and successful cure of acute dysentery, we cannot too strongly advert to the point, that its good effect mainly depends upon duly adjusting the mode and quantity to the necessities of the case. It will often do harm if used indiscriminately as *principal*, when its real place is *auxiliary*; or vice versa.

In the low and congestive types of this disease, well timed small bleedings, from a small orifice, and in the recumbent posture, have a tendency to rouse the nervous influence, and render the system susceptible to salutary stimulation from the use of moderate doses of camphor, ammonia, bark, mineral acids, wine and appropriate enemata; and thus assist in the reproduction of healthy action: but it is obvious that in such cases, blood-letting must not be carried to syncope; and that remedies for exciting the activity of the *vis medicatrix* must be exhibited at the same time—without such adjuncts the abstraction of blood would rather accelerate than retard the process of disorganization.

If the principle upon which the various remedies act upon the constitution; and the effect required from them be properly understood, and duly considered; there can be no great difficulty in accounting for the unfortunate results which sometimes occur in consequence of their misemployment.—OFFG. ED.

We must bear in mind and consider that, in some obstinate cases, the disease may be continuing, either in consequence of our *well directed* efforts not being sufficiently energetic, or because we have combined them with others which have counteracted the good effects we might otherwise have obtained—I would particularly mention *Calomel*, and *irritating purgatives*. Young Medical Officers are haunted with *Calomel*; and Twining has certainly overpraised repeated strong purging; The Deputy Inspector General informed me that in his tour of inspection he found some cases which *had been Dysenteric, labouring under 3i doses of compound powder of Jalap given daily at noon*, which got well *immediately* on removing the cause.

I am sure that I have seen very serious harm done by strong continued doses of *Calomel*, as well as of *Jalap*; their irritation preventing the patient's convalescing about the 3d day, and turning the scale in the wrong direction.

About the 3d or 4th day after a case has come under treatment, (or even earlier) the event may generally be anticipated. If the patient is to die, the pulse becomes smaller and more frequent, he generally becomes more restless, sometimes he feels chills or has great internal heat and thirst, there is a peculiar factor about his body, or he has abundant clammy perspiration on the head and chest; and he complains of a feeling of great weakness and exhaustion—the circulation is determined to, and concentrated in the parts affected. He may get over it, but his recovery will be more owing to the *vis medicatrix* of his own constitution, than to much medical treatment beyond rest and simple nourishment; and if Medical Officers were sufficiently aware of this, they would not interfere so much with nature's own efforts, and harass the patient with a farrago of medicines, and loads of food and wine after reducing inflammatory symptoms, as some do.

Great prejudices have prevailed in India, and I fear still exist against the employment of *free* general bleeding in the beginning of Fevers and Dysentery; and the action of *Calomel* is too often solely trusted to. Drs. McLean, Johnson, and Ballingal were among the first who, by example and precept, endeavoured to shew us this error; and the paper on Tropical Dysentery in the first volume of the Madras Medical Journal, by Assistant Surgeon

Murray of the Bengal Service, is full of excellent practical instruction on this and other points.

Mr. Annesley in detailing the treatment of the *acute form* of Dysentery, where it occurs in plethoric individuals, recommends general bleeding, and states, that "much is to be done in a few hours; and if the disease be not got under controul in that time, the patient is either lost, or the basis of a broken constitution is laid." This, however, is not saying enough; and I can safely add, that in old Soldiers with shattered constitutions, and in men worn out from long service in this country, (a great proportion of such compose the 54th Regiment) general bleeding is well borne in this disease, and is no less necessary than in young plethoric subjects, for preventing disorganization.

Where bleeding is required, one prompt and effectual abstraction, whether general or topical, on first admission, will save the loss of much blood in the end, as well the use of many other severe and debilitating measures in the after stages; and I have to observe, that I find old, delicate, and drunken men cannot bear *much* mercury—they take at least a twelve-month to recover from its constitutional effect before they are able to endure exposure to inclement weather on duty,—and many *never get over it*.

Rapid general bleeding to effect, promptly alters acute local determination of the circulation, which topical bleeding by leeches to *an equal extent*, would not effect; but the latter is to be preferred where the disease is chronic, and without much constitutional excitement. Mr. Annesley recommends "drastic purgatives to act upon the *mucous glands*, and to be given without intermission"—but I would refer to the proportion of deaths in bad cases under such discipline, and under the Mercurial (Calomel and Opium) routine; if tables could be obtained comparing the result of these practices, with that of more *rational* treatment: So far from curing inflammation and ulceration of the mucous membrane of the bowels, these two practices, are, of all others (*after the astringent plan*) in my opinion, the most likely to create and keep up irritation, ulceration, muco-purulent secretion, and straining. Drastic purgatives are prescribed by some, upon the principle of getting rid of the mucous discharge, as if that, by lodging in the bowels, acted injuriously; whereas it is the effect of the irritation of the local increased action.

One of the best remedies, I have found for giving a healing disposition to the intestinal ulceration in the chronic stage, of counteracting the destructive influence of symptomatic fever, and obviating the feeling of debility, is the Nitrous acid, well diluted with water, and mixed with opium and Mucilage. I give from ʒß to ʒj of the acid in this way in the 24 hours ; and at the same time apply warm swathes to the Abdomen, as recommended by Dr. Good.*

On looking over Registers of Hospital Practice, I am inclined to think that the prescriptions of tonics and stimulants, in the form of Tinctures, Quinine, Wines, and extra articles of diet, in many of the cases, would, if published, astonish even those who ordered them :—and I suspect they would afford many a *memento causæ mortis*.

I append a detail of all my fatal cases, (which may be given with these remarks or not), and I would observe, that I am convinced a medical man will learn fully as much, if not more, from reflecting on his fatal, than on his successful cases ; at any rate from contrasting the two.

In the month of October, we had an increase of bad cases ; with a greater tendency in the local inflammation to run its course more rapidly than usual into gangrene, with sinking of the vital powers ; and from what I before saw in my practice, and now know, I am decidedly of opinion that by my old insufficiently energetic mode of treatment, I should have lost a great number of the patients that came in at that time ; indeed I think I should have done positive harm by giving Calomel and Opium in the routine way I used to do, repeating it every 2 or 3 hours, and sometimes adding mercurial frictions with the view of inducing salivation, upon which effect I chiefly depended for the salvation of my cases.

* It is extraordinary how this admirable plan of applying fomentation, (by Swathe) with derivative rubefacients, is neglected in this country ; as it is so infinitely preferable to the warm bath, semicupium, or coxiluvium, with blisters. Flannels wrung (by *being twisted on two sticks*) out of hot water, are to be applied over the whole abdomen and bound on with a piece of dry cloth, for the simple swathe—and after the acute stage is past, the wrung flannel is to be sprinkled with hot spirits of turpentine or hot tincture of Capsicum, and allowed to remain as long as the patient can endure it, for a counterirritant or derivative epithem.—
OFFG. ED.

I have since been led to consider mercury almost in the light of a *poison* in cases rapidly progressive to sloughing and gangrene, further than one or two *full* doses of Colomel at the *very* beginning ; but only became thoroughly aware of this after I left off the mercurial practice.*

* We shall say, relative to the use of mercury in dysentery, that, joined with general or local abstraction of blood at the onset of acute cases, we have seen one or two \mathfrak{J} doses of calomel attended with the most marked benefit ; and also at more advanced stages we have seen such a dose afford more relief, though often transient, than any other medicine we could exhibit ; but that when combined with opium and antimonials, the soothing effect was in general lost.

Whether the calomel acts by altering and equalizing vascular action through its agency on the nervous power, we do not pretend to decide. In cases where the pulse is hard, sharp, and frequent, indicating a high phlogistic condition of the system, we have not found calomel unaided by depletion, do good, in any dose ; neither have we found its effects beneficial where the pulse is small and quick (120), with an irritable or low state of the system.

In acute dysentery, the effect of a full (\mathfrak{J}) dose of calomel, in conjunction with *adequate* bleeding, is anti-inflammatory ; but that of a small dose frequently repeated, is to irritate and teaze the mucous membrane. The effect is local in the first instance, but the system soon participates, whether that effect be sedative or irritant.

In a scruple dose, some may be inclined to view the operation of calomel as analogous to that of astringents or opiates, as it checks the purging for a time, and relieves griping, tenesmus, and anal scalding ; but its mode of operation is very different. Astringents act by constricting the mouths of the extreme or secreting vessels, which causes the fluids to accumulate in them ; whereas calomel acts by altering the diseased action of the capillaries. Opium again, in a full dose, lulls the sensorium commune, and also constricts the vessels of the part, thus favoring congestion ; and from what our experience tells us, the combination of calomel with opium is not by any means so beneficial in the acute stage of dysentery, as the judicious adaptation of each, separately.

As calomel does not act remedially while a state of high excitement exists, it has been alleged that, properly speaking, it is not a *sedative* ; which is correct—yet this is perhaps the only state of the system, in which it is remedial ; or, we should rather say, in the state immediately after high excitement has been reduced by the abstraction of blood, but the tendency to the renewal of local inflammation continues. If bleeding to a sufficient extent be premised, then one or two scruple or half scruple doses, according to circumstances, will generally act beneficially on the capillaries, altering their tendency to renew the morbid action, and correcting their secretions : but if the effect of the calomel be not decidedly and promptly salutary, as happens in some constitutions, then its further use should be carefully watched, that it do not prove hurtful.

Some of the preparations of Antimony pushed to nauseate strongly, (though no doubt inappropriate in inflammation of the mucous Coat of the Stomach and Duodenum,) are servicable in Dysentery accompanied with high general vascular excitement, from their special sedative influence on the functions of the heart; but otherwise they may not be given, as they strongly depress the nervous energy. They were great favorites with Sir John Pringle and still are so with some others, but I have seldom used them since I adopted the *general bleeding* sytem, although they might, probably, sometimes save a bleeding. *

Simple abstraction of blood, from its merely unloading the circulation, and reducing general excitement, unless when carried to syncope, when it has a decidedly revulsive effect does not cure the *local* morbid tendency, as the parts are still under the influence of the primary cause, which is capable of renewing the disease when reaction ensues; but calomel, from its alterant property, most commonly changes this local morbid tendency, and obviates the re-development of inflammation, if ideosyncrasy be not against it.

When we hear of those who say they have tried calomel in dysentery, and failed to derive any advantage from it, we are inclined to suspect that they have not known how to *use* it.

With regard to the common *routine* practice of giving calomel and opium (with antimonial powder) in small and frequently repeated doses, in all cases, from the first entrance of a dysenteric patient into hospital, we consider its “aiders and abettors” as prejudiced men, (no doubt honestly so) and not open to conviction from observation and experience; and we apprehend that they will be unsuccessful practitioners in all cases of rapidly progressive dysentery.

In this latter type of the disease, accompanied with *sinking* of the vital powers (a state different from *exhaustion*, which indicates power and proneness to reaction) we concur with Dr. Everard, that mercury in any shape is inadmissible; and we believe it to be scarcely less so in cases of relapse with chronic ulcerative disorganization—yet, how often do we see it prescribed, and even persevered in in such like cases, till death releases the unfortunate sufferer from the clutches of the mercurial bigot!

In infants, and children under the age of about 3 years, mercury seems incapable of producing salivation; therefore any attempt to push it in them, cannot be practised without manifest injury.—OFFG. ED.

* We consider this observation about the use of Antimonials more just than Mr. MacDonell's sweeping condemnation of them in the preceding Paper; and it was from seeing the above paragraph at the time, that we deferred making any note on Mr. MacD.'s remark, till both opinions should be before our readers.—OFFG. ED.

The prevalence of the disease, and the severity of its symptoms in October, I have reason to ascribe to the nights having become much colder, while the days continued hot and sultry, and the exposure of our men on guard to the change.

In one of the fatal cases (Johnston), which occurred in that month, I feel vexed with myself that the second bleeding was deferred so long; and in another of them, (Ross, a delicate subject) the symptoms were so masked and obscure that I own I was deceived; the general blood-letting was too sparing and not repeated, to which, perhaps, may be attributed the fatal result.

Not the least important part of the treatment is the Dietetic. It must consist in almost entire abstinence at first, and afterwards it should be farinaceous, in which milk may be an ingredient; but it should not be very thin and sloppy, nor allowed in great quantity: solids (even Chicken and Fish) must be avoided till convalescence is fairly established.

It is of great consequence to distinguish the complication of Hepatic disease with Dysentery, and I fancy I am now nearly able to do this by the intestinal phenomena, even when the more pathognomonic symptoms of the former affection in the right Hypochondrium* may be wanting.

When Hepatic complication exists, the stools are then often greenish, or clay-coloured, more or less fæculent, and irregular; they excite more exquisite pain in their passage through the diseased Intestines and Anus; sickness with vomiting (of bilious matter) frequently attend, indicating irritation of the small intestines with Gastric *consensus*; the pulse is more excited, thirst is greater, the tongue is pasty, and the acute symptoms are altogether *more persistent*. Such manifestations lead me to *suspect* it; I then examine carefully for Hepatic affection, and if I discover it, I give mercury in a way to induce rapid salivation.†

* We beg Medical Officers to note this, and, in order to ascertain the point decidedly, we request them to compare symptoms during life with the appearances on dissection—Dr. E.'s observations seem very important, but require confirmation.—OFFG. ED.

† When Mercury is to be employed externally, which is perhaps the best mode in such cases, as Calomel in frequently repeated doses is a medicine so irritating to the mucous membrane of the intestinal canal, the best plan is to place scruple quantities of the Ungt. Hydr. Fort. in the axillæ where absorption goes on very rapidly: this mode is more cleanly, equally effectual, and less fatiguing to the Patient than friction.—OFFG. ED.

When the Liver is affected, and suppuration has taken place in it, the true dysenteric symptoms will sometimes be got rid of, yet the patient will retrograde in other respects: he will emaciate and become hectic, with profuse cold sweats; and will have frequent irregular motions of a thin bilious character, with much griping. In such cases the existence of Hepatic abscess may be pretty certainly predicted, whether any other symptoms be present or not; mercury is then worse than useless, and before the patient becomes greatly sunk, I would explore the organ for matter with a proper instrument, and if discovered, draw it off in the manner recommended by Dr. Murray, in No. 4 of the Medical Journal. I enclose a case of Cholera, the only one we have had since our arrival at Fort St. George, in which the *hot saline Enemata* had a very marked good effect in bringing about re-action.

[We give this case of Cholera—The appended cases of Dysentery have not particular interest.—We are aware that Dr. Everard has been successful in his practice, and therefore have read his paper carefully, and made an unusual number of notes on it.—OFFG. ED.]

9TH NOVEMBER. James Johnston, Æt. 36. Convalescent from Hepatitis, at 9 A. M. became suddenly affected with giddiness and weakness while going to the rear, and began purging and vomiting *Congee-like* fluid: countenance sunk; severe cramps in his legs; Pulse small.

R. Calomel gr. v., Opii. gr. j. m. ft. Pil. j. S. S.—Sumat Haust ex Spirit. Ammoniae Aromat. m. xx., Spir. Lavendul: Comp. m. xv., Aq. Menthæ Pip. ʒj m.

Frictions of warm Turpentine to the Spine and Epigastrium.

10 A. M. he vomited the Calomel and Opium 3 times; complains of ringing in his ears; voice weak and husky; great thirst; P. scarcely perceptible at the wrist.

Rept. Pil.—Habt. Haust. Effervescens; et Cont. Frictio. *Hot tins to the feet.*

Noon—has had severe cramps, which weakened him very much; appears to be sinking, P. gone.—Habt. Statim Enema Salinum Calidum.

He has retained the Enema some minutes, the pulse has risen a little, and vomiting ceased. His thirst is excessive.

Contr. Haust. Effervescens sæpe; et Frictio.; Rept. Pil.

Near 1. p. m.—He appeared to be relapsing into collapse; the hot Saline Enema was repeated, after which the pulse rose steadily, and he expressed that he felt comfortable; he also made some urine, and said the great oppression in his chest was removed.

Vespere.—Doing well—Ql. Recini. \mathfrak{z} j. From this time he was convalescent.

R. H. EVERARD, M. D.

